

Certification Summary Information Report

Manufacturer	American Honda Motor Co., Inc.	Manufacturer Code	HNX
Engine Family	LHNXC01.0CFA	Model Year	2020
Certificate Number	LHNXC01.0CFA-016	Certificate Issue Date	07/01/2019
Certificate Effective Date	07/01/2019	Certificate Revision Date	06/24/2019

General Information			
Vehicle Category	Highway Motorcycle - III(>-279cc)	Sales Areas of All Vehicles/Engines in This Engine Family	Some 50, Some 49
Small Volume Manufacturer Recognition	Regular Volume	Are you Certifying This Vehicle/Engine By Design	No
Manufacturer Code assigned by CARB	HOND	Parent Company Name	--
EPA Certification Fee Paid Date	05/15/2019	Application Type	Correction
Permeation Family Name	LHNXPMETAL02	Does this Perm Family participate in Average Banking and Trading?	No
Does this EF participate in an EPA and/or CARB emission averaging program?	No	Does this EF participate in EPA and/or CARB emission averaging program?	
Testing procedure applied for exhaust emissions values	40CFR86, Subpart E: Chassis test	If Other, Please provide EPA/CARB approval ID for this testing procedure	--
Are you the original manufacturer of the certifying vehicle/engine?	No		
Vehicle Original Equipment Manufacturer	Country where the Vehicles were assembled	Engine Original Equipment Manufacturer	Country where the Engines were assembled
Honda Motor Co., Ltd.	Japan	Honda Motor Co., Ltd.	Japan
Manufacturer Comments			

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EPA Emission Standards and Certification Levels

EPA Exhaust Emissions units:G/KM				
Air Pollutant	HC	NOx	HC+NOx	CO
Certification Level			0.3	0.8
Family Emission Limit				
Emission Standards			0.8	12.0
Applicant Notes	--			

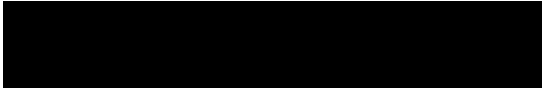

CARB Emission Standards and Certification Levels

CARB HMC Early Compliance Multiplier: 1.0					Evaporative Emissions (HMC CARB-only) Diurnal + Hot Soak Evaporative Emissions (Unit: g/test):	
Air Pollutant	THC	NOx	THC+NOx	CO	LHNXU0018XZX	
Certification Level	0.2		0.3	1	0.3	
Family Emission Limit						
Emission Standards			0.8	12	2.0	
Emission Useful Life (UL) as applicable	UL (years):5		UL (km):30000		UL (years):5	UL (km):30000
Applicant Notes:						

Engine Family Description

Engine Family Useful Life	EPA Required Useful Life		
EF Fuel System Type	Single Fuel System		
	Primary Operating Fuel Type	Fuel Type, If Other	
	Gasoline	--	
Combustion Cycle	4-Stroke		
Combustion Cycle, If Other			
Cylinder Arrangement	In Line		
Cylinder Arrangement, If Other			
Number of Cylinders	4	Valves per Cylinder	4
Engine Type	Reciprocating (otto cycle)		
Engine Type, If Other			
Engine Cooling Media	Liquid Cooled		
Engine Cooling Media, If Other			
Does this engine family contain multiple displacements?	No	New Technology	No
Technology explanation	--		
Applicant Notes	--		

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Exhaust Emission Control Information			
ECS Reference Number	1	Is this engine family equipped with a catalytic converter?	Yes
Total number of catalytic converters	1	Applicable catalytic converter configuration	Single
Catalytic converter type used	Three Way Catalyst (TWC), single-bed, closed-loop warm up		
Catalyst Manufacturer Name			
Catalyst Manufacturer Location			
Does the engine family use an Exhaust Gas Recirculation (EGR) technology as part of the Emission Control System?	No	Description of the EGR technology used	--
Applicable engine fuel system type	Sequential Multiport FI		
If Other, Enter a description of the fuel system			
Method of air aspiration for the engine	Naturally Aspirated		
Method of engine aspiration, If Other			
Charge Air Cooler Type	No Air Cooler		
Electronic engine control module type	Engine Control Module		
Applicable method of air injection methodology	Pulse Secondary Air Injection		
Air injection methodology, If Other			
Air/fuel feedback sensor used on this engine family	Yes		
Sensor Type	Heated Oxygen Sensor		
Sensor Type, If Other			
Number of feedback sensor(s) used	1		
Configuration of the feedback sensors arrangement	Single		
Applicant Notes			
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Engine Family		LHNXC01.0CFA		Model Year		2020	
EPA Deterioration Factor Type		HC		NOx		HC + NOx	
Multiplicative		1.219		1.096		9.999	
						CO	
						1.174	
Federal Mandatory Greenhouse Gas (GHG) Reporting							
GHG Name	GHG Value	Unit of GHG Value	Measured/Estimated at Distance (km)	By Method	Test Vehicle ID	Reference/Citations	Test/Estimation Date
CH4	0.025	Grams Per Kilometer	3511	Tested result from the EDV(s) of the Engine Family	JH2SC7770HK000003	Directly measured value	10/21/2016
CO2	142	Grams Per Kilometer	3511	Tested result from the EDV(s) of the Engine Family	JH2SC7770HK000003	Directly measured value	10/21/2016
N2O	0.003	Grams Per Kilometer	3511	Tested result from the EDV(s) of the Engine Family	JH2SC7770HK000003	Directly measured value	10/21/2016
Applicant notes for GHG data							
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Engine Family	LHNXC01.0CFA	Model Year	2020
EPA - ONLY Permeation Emissions Control/Test Data			
Fuel Tank Permeation Emissions Details			
Fuel Tank #1			
Permeation Family Name	LHNXPMETAL02	Certification Level (g/m2/day)	0.8
Emission Standard (g/m2/day)	1.5	Family Emission Limit (g/m2/day)	--
Certification Method	Emission tests	Fuel Tank Manufacturer	Honda Motor Co.,Ltd.
Other			
Use Carry-over Test Data?	Yes	If carryover, from Permeation Family	KHNXPMETAL02
Carryover DF	Yes	If carryover, from DF Permeation Family	KHNXPMETAL02
Tank Material	Metal		
Tank Material if Other			
Control Strategy	Inherently Low/Zero Permeation Material		
Least Thickness (mm)	--	Least Barrier Weight (%)	--
Least Barrier Mol (%)	--	Least Barrier Thickness (mm)	--
Production Method	Other Production Method		
Production Method if Other			
Press and we			
Test Data (g/m2/day)	0.80	DF (g/m2/day)	0.00
EPA Certificate Number	--		
Fuel Line Permeation Emissions Details			
Fuel Line #1			
Certification Level (g/m2/day)	10	Emission Standard (g/m2/day)	15
Permeation Emissions Certification Method	Emission tests	Fuel Line Manufacturer	SUMITOMO RIKO
Certified By Design LINE	--		
Other			
Use Carry-over Test Data?	Yes	If carryover, from Permeation Family	KHNXPMETAL02
Carryover DF	Yes	If carryover, from DF Permeation Family	KHNXPMETAL02
Fuel Line Material	Other		
Fuel Line Material			
FKM/ECO//AGE-ECO			
Least Thickness (mm)	3	Test Results (g/m2/day)	9.5
DF (g/m2/day)	0.0	EPA Certificate Number	--
Fuel Line #2			
Certification Level (g/m2/day)	10	Emission Standard (g/m2/day)	15
Permeation Emissions Certification Method	Emission tests	Fuel Line Manufacturer	SUMITOMO RIKO
Certified By Design LINE	--		

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Other			
Use Carry-over Test Data?	Yes	If carryover, from Permeation Family	KHNXPMETAL02
Carryover DF	Yes	If carryover, from DF Permeation Family	KHNXPMETAL02
Fuel Line Material	Other		
Fuel Line Material			
FKM/ECO//AGE-ECO			
Least Thickness (mm)	3	Test Results (g/m2/day)	9.5
DF (g/m2/day)	0.0	EPA Certificate Number	--
Fuel Line #3			
Certification Level (g/m2/day)	10	Emission Standard (g/m2/day)	15
Permeation Emissions Certification Method	Emission tests	Fuel Line Manufacturer	KOKOKU
Certified By Design LINE	--		
Other			
Use Carry-over Test Data?	Yes	If carryover, from Permeation Family	KHNXPMETAL02
Carryover DF	Yes	If carryover, from DF Permeation Family	KHNXPMETAL02
Fuel Line Material	Other		
Fuel Line Material			
FKM/ECO			
Least Thickness (mm)	2	Test Results (g/m2/day)	10.1
DF (g/m2/day)	0.0	EPA Certificate Number	--
Comments			

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Engine Family	LHNXC01.0CFA	Model Year	2020
Models Covered			
Model #1			
Reference Model Number	1	Final Assembly Manufacturer Name	Honda Motor Co. Ltd.
Manufacturer Model Name	CBR1000RR	Commercial / Advertised Model Name	CBR1000RR
Engine Code	LED1	Vehicle Category	HMC:Class III
Evaporative Family (CARB)	LHNXU0018XZX	Number of Evaporative Canisters (CARB)	1
Displacement (cc)	1000	Bore (mm)	76.0
Stroke (mm)	55.1	Basic Ignition Timing (degrees, BTDC)	3.3
Rated Power (kW)	126	RPM @ Rated Power	10400
Rated Torque (nt-m)	116	RPM @ Rated Torque	10400
N/V Ratio	45.2	Curb Mass (kg)	195
Equivalent Inertial Mass (kg)	280	Loaded Vehicle Mass (kg):	275
Transmission (e.g. M5, A3, etc.)	M6		
Vehicle Emission Compliance Information (VECI) Label Type			
50-state sales w/ 50-state Label			
Fuel System			
Emission Control System (model / rating specific)	1	Projected Sales (CBI) - CA Only	
Projected Sales (CBI) - US Total (includes CA Sales)		Projected Sales (CBI) - US (49-States)	
Mfr Previously Exempted?	--		
Permeation Family Name (s)	LHNXPMETAL02		
Applicant Notes			
Model #2			
Reference Model Number	2	Final Assembly Manufacturer Name	Honda Motor Co.Ltd.
Manufacturer Model Name	CBR1000RA	Commercial / Advertised Model Name	CBR1000RR ABS
Engine Code	LED2	Vehicle Category	HMC:Class III
Evaporative Family (CARB)	LHNXU0018XZX	Number of Evaporative Canisters (CARB)	1
Displacement (cc)	1000	Bore (mm)	76.0
Stroke (mm)	55.1	Basic Ignition Timing (degrees, BTDC)	3.3
Rated Power (kW)	126	RPM @ Rated Power	10400
Rated Torque (nt-m)	116	RPM @ Rated Torque	10400
N/V Ratio	45.2	Curb Mass (kg)	197
Equivalent Inertial Mass (kg)	280	Loaded Vehicle Mass (kg):	277
Transmission (e.g. M5, A3, etc.)	M6		
Vehicle Emission Compliance Information (VECI) Label Type			
50-state sales w/ 50-state Label			
Fuel System			
Emission Control System (model / rating specific)	1	Projected Sales (CBI) - CA Only	

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Projected Sales (CBI) - US Total (includes CA Sales)		Projected Sales (CBI) - US (49-States)	
Mfr Previously Exempted?	--		
Permeation Family Name (s)	LHNXPMETAL02		
Applicant Notes			
Model #3			
Reference Model Number	3	Final Assembly Manufacturer Name	Honda Motor Co.Ltd.
Manufacturer Model Name	CBR1000S1	Commercial / Advertised Model Name	CBR1000RR SP
Engine Code	LED2	Vehicle Category	HMC:Class III
Evaporative Family (CARB)	LHNXU0018XZX	Number of Evaporative Canisters (CARB)	1
Displacement (cc)	1000	Bore (mm)	76.0
Stroke (mm)	55.1	Basic Ignition Timing (degrees, BTDC)	3.3
Rated Power (kW)	126	RPM @ Rated Power	10400
Rated Torque (nt-m)	116	RPM @ Rated Torque	10400
N/V Ratio	45.2	Curb Mass (kg)	196
Equivalent Inertial Mass (kg)	280	Loaded Vehicle Mass (kg):	276
Transmission (e.g. M5, A3, etc.)	M6		
Vehicle Emission Compliance Information (VECI) Label Type	50-state sales w/ 50-state Label		
Fuel System			
Emission Control System (model / rating specific)	1	Projected Sales (CBI) - CA Only	
Projected Sales (CBI) - US Total (includes CA Sales)		Projected Sales (CBI) - US (49-States)	
Mfr Previously Exempted?	--		
Permeation Family Name (s)	LHNXPMETAL02		
Applicant Notes			
Model #4			
Reference Model Number	4	Final Assembly Manufacturer Name	Honda Motor Co.Ltd
Manufacturer Model Name	CBR1000S1	Commercial / Advertised Model Name	CBR1000RR SP
Engine Code	LED3	Vehicle Category	HMC:Class III
Evaporative Family (CARB)	--	Number of Evaporative Canisters (CARB)	1
Displacement (cc)	1000	Bore (mm)	76.0
Stroke (mm)	55.1	Basic Ignition Timing (degrees, BTDC)	3.3
Rated Power (kW)	126	RPM @ Rated Power	10400
Rated Torque (nt-m)	116	RPM @ Rated Torque	10400
N/V Ratio	45.2	Curb Mass (kg)	195
Equivalent Inertial Mass (kg)	280	Loaded Vehicle Mass (kg):	275

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Engine Family	LHNXC01.0CFA	Model Year	2020
Transmission (e.g. M5, A3, etc.)	M6		
Vehicle Emission Compliance Information (VECI) Label Type	49-state Sales w/ 49-state Label		
Fuel System			
Emission Control System (model / rating specific)	1	Projected Sales (CBI) - CA Only	
Projected Sales (CBI) - US Total (includes CA Sales)		Projected Sales (CBI) - US (49-States)	
Mfr Previously Exempted?	--		
Permeation Family Name (s)	LHNXPMETAL02		
Applicant Notes			